

Application No. 09/560,819
Art Unit 2879

Amendment to the drawings:

Add one new sheet of drawings, bearing Figures 1A and 1B.

REMARKS

This is in response to the Office Action that was mailed on June 14, 2006. The title of the invention is amended as suggested by the Examiner. As required by the Examiner, drawings are presented, based upon claims 1 and 14, and the specification is amended accordingly. Claims 1 and 14 are amended in accordance with the disclosure to clarify that at least two phosphor sheets are thermo-compression bonded in the present invention. Support for this amendment can be found, e.g., on pages 17 and 21 of the specification. No new matter is introduced by the present Amendment. Claims 1, 3-8, 10, 12, 14, and 16-18 remain pending in the application.

DRAWINGS. As required by the Examiner, Figures 1A and 1B provide schematic representations of features of the invention involving the thickness of at least two phosphor layers in the panel as claimed in claims 1 and 14.

Claims 1, 3, 5-8, 10, 12, 14, and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,979,200 (hereinafter "Umemoto") and U.S. Patent No. 5,153,078 (hereinafter "Kojima") in view of Japanese patent publication JP 08-313699 A (hereinafter "Ohara"). Claim 4 was rejected under 35 U.S.C.

\$103(a) as being unpatentable over Umemoto, Kojima, Ohara, and U.S. Patent No. 5,519,228 (hereinafter "Takasu"). Office Action, pages 8-9. The rejections are respectfully traversed. Applicant incorporates by reference in this regard arguments and evidence already of record in prior papers filed in the present application.

Ohara discloses multiple phosphor layers in which the thickness of each layer may be different. However, in Ohara, the amount of binder in each layer is the same, and thermo-compression bonding is not employed in the Ohara technology. Umemoto discloses that the proportion of the binder resin in the X-ray phosphor in the fluorescent layer in the vicinity of the protective layer is higher than the proportion of binder resin to the X-ray phosphor in the remainder of the fluorescent layer. However, in the Umemoto technology, the thickness of each layer is the same, and the layers are not thermo-compression bonded. In Kojima, the phosphor layer is a single layer, and the phosphor layer is coated and dried on an undercoat layer including a binder in advance, and only then is thermo-compression bonded.

Since Kojima does not disclose thermo-compression bonding of multiple phosphor layers which have been separately coated and dried on a temporary support, a person of ordinary skill in the art would not arrive at the invention presently claimed based upon the combination of Umemoto, Kojima, Ohara, and Takasu. In order to

emphasize this area of distinction over the prior art, the independent claims herein have been amended to recite that "the radiation image conversion panel is produced by thermo-compressing at least two **phosphor** sheets, which have been separately coated and dried".

Kojima discloses thermo-compression of a single phosphor layer which has been coated and dried on an adhesive layer. However, neither Ohara nor Umemoto employs thermo-compression bonding. Thus, contrary to what appears to be the Examiner's understanding, the prior art does not disclose the entirety of the layer structure feature of the present invention. Neither Kojima nor any other reference of record discloses thermo-compression of multiple phosphor layers that have been separately coated and dried.

In the present invention, multiple phosphor layers that have been separately coated and dried are thermo-compression bonded to a reflective layer containing a binder and fine particles. Nothing in the references applied by the Examiner would motivate a person of ordinary skill in the art to take that approach to making a radiation image conversion panel.

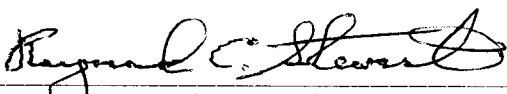
The Declaration under 37 CFR 1.132 of Hiroshi Ogawa - filed herein on May 31, 2006 - establishes that the radiation image conversion panel of the present invention, produced by thermo-compressing at least two sheets which have been separately coated

and dried, provides unexpectedly superior properties as compared to radiation image conversion panels made in a manner not contemplated by the present claims. For reasons already of record in prior papers filed by Applicant in the present application, and based upon that experimental evidence, Applicant is clearly entitled to a patent on the claims presently under consideration by the Examiner.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Richard Gallagher (Reg. No. 28,781) at (703) 205-8008.

Respectfully submitted,

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